

CLAIMS

1. A process for the recovery of metals, in particular precious metals, from electronic scrap, characterized in that it comprises:

5 - a leaching phase in which said electronic scrap is put in contact with a leaching solution comprising cupric chloride and one or more alkaline halides suitable for complexing the metallic species in solution, to obtain the dissolution of the metals exposed to said solution,
10 with the exception of gold,

- a recovery phase of the gold in solid form.

2. The process according to claim 1, characterized in that said alkaline halides of the leaching solution are alkaline chlorides selected from the group comprising so-
15 dium chloride, potassium chloride, and mixtures thereof.

3. The process according to claim 1, characterized in that said leaching phase is effected at a temperature ranging from 50 to 105°C.

4. The process according to claim 3, characterized in
20 that said leaching phase is effected at a temperature ranging from 70 to 90°C for a time of 1 h -3 h.

5. The process according to claim 1, characterized in that said leaching solution has a pH within the range of 0 to 3.

25 6. The process according to claim 1, characterized in

that said leaching solution has a copper content ranging from 20 to 50 g/l.

7. The process according to claim 1, characterized in that before the recovery phase of the gold, a sieving
5 phase is effected, in which the leaching solution with the gold residues is separated from the solid fractions.

8. The process according to claim 1, characterized in that said gold recovery phase is effected by means of filtration.

10 9. The process according to claim 1, characterized in that it comprises a further recovery phase of the silver from the leaching solution.

10. The process according to claim 1, characterized in that it comprises a further recovery phase of the copper
15 from the leaching solution.

11. The process according to claim 10, characterized in that the leaching solution, by air bubbling, produces a precipitate based on iron hydroxide and tin oxide, contemporaneously re-oxidizing the cuprous chloride to cupric chloride.
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12. The process according to claim 11, characterized in that the solution is re-circulated to the leaching phase after recovering said precipitate by filtration.

13. The process according to claim 1, characterized in
25 that the solid fractions, recovered from the sieving

phase are subjected to

- flotation to separate the cards and plastic material,
- magnetic separation to recover the fraction rich in iron of the components of the electronic circuits,
- 5 - separation with parasite currents to separate the fraction rich in aluminum.

14. The process according to claim 13, characterized in that the non-separated electronic components comprising the chips are ground and re-circulated to the leaching
10 phase for the recovery of the remaining metal fractions.

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